

REMARKS

Claims 1-44 are currently pending in the application. Claims 1-44 stand rejected. Independent claims 1, 12, 23, and 34 are amended herein.

Claims 1-3, 8-9, 34-36, 41 and 43 were rejected under 35 U.S.C. § 102(b) as being anticipated by Lumsden (U.S. Pat. No. 4,338,690). Inasmuch as the rejections apply to the claims as amended, Applicants respectfully traverse the rejection.

Independent claims 1, 12, 23, and 34 each require periodically transmitting a request for authentication information from a host system to the signal conditioner, receiving the authentication information from the signal conditioning circuitry in response to the request, comparing the authentication information with initial information, and signaling a tampering condition in the signal conditioning circuitry in response to the authentication information not being equal to the initial information. Advantageously, the invention provides a system for preventing tampering with a signal conditioner remote from a host system.

In contrast, Lumsden does not require or disclose signaling a tampering condition. In addition, Lumsden does not disclose any authentication information. Instead, Lumsden discloses a system for reporting electrical power usage from a residential power meter to a central computer (see abstract). Lumsden provides a transponder that acts as a simple storage device for utility data. The transponder receives data from a data source and stores it until such data is requested through an external instruction (see col. 3, lines 34-59). Lumsden discloses that the central computer sends commands to these residential power meters over telephone lines (see col. 2, lines 56-59). The commands can specify that a particular meter report stored power consumption data (see col. 2, lines 21-24). Lumsden also discloses requesting information concerning a load of a particular user and subsequent actions to alleviate excessive loads to that user (see col. 4, lines 44-59). Multiple meters in Lumsden can communicate over a single telephone line. Therefore, a particular power meter is identified by a unique code stored in that meter (see col. 2, lines 48-56), i.e., a message

is broadcast by the central computer, but only the transponder specified by an ID code in the broadcast message receives and acts on the message.

Lumsden does not disclose periodically transmitting a request for authentication information. In addition, Lumsden does not disclose receiving authentication information in response. Furthermore, Lumsden does not disclose comparing the authentication information with initial information. Moreover, Lumsden does not disclose signaling a tampering condition in the signal conditioning circuitry in response to the authentication information not being equal to the initial information. Lumsden does not disclose signaling a tampering condition, does not disclose authentication information, and does not receive or process any authentication information in order to detect tampering. A close inspection of Lumsden does not reveal the terms "tamper," "authenticate," or "calibrate," or any variations thereof.

For the foregoing reason, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3, 8-9, 34-36, 41 and 43 under 35 U.S.C. § 102(b) as being anticipated by Lumsden.

Claims 12-14, 19-20, 23-25, 30, and 31 stand rejected under 35 U.S.C. § 103(a) as being obvious over Lumsden in view of U.S. Patent 6,526,839 (Barger et al.) and further in view of U.S. Patent 3,355,944 (Sipin).

The rejection reiterates the assertion that Lumsden discloses a meter system as in the present invention, but lacks disclosure of meter electronics for a Coriolis flowmeter. This is incorrect. As previously discussed, Lumsden does not disclose signaling a tampering condition, does not disclose authentication information, and does not receive or process any authentication information in order to detect tampering. Therefore, the combination of Lumsden, Barger, and Sipin does not provide a system that detects tampering.

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 12 and 23 under 35 U.S.C. § 103(a) as being obvious over Lumsden, Barger, and Sipin. Claims 13-14, 19-20, 24-25, and 30-31 depend from independent claims 12 and 23 and therefore are patentable for the reasons previously discussed.

Claims 4-11, 15-18, 21-22, 26-29, 32-33, 37-40, 42, and 44 stand variously rejected under 35 U.S.C. § 103(a) as being obvious over Lumsden in view of one or more of U.S. Patent 5,014,038 (Leigh-Monstevens), U.S. Patent 6,289,456 (Kuo et al.), U.S. Patent 4,933,668 (Oyer et al.), U.S. Patent 6,526,839 (Barger et al.), and U.S. Patent 3,355,944 (Sipin). Claims 4-11, 15-18, 21-22, 26-29, 32-33, 37-40, 42, and 44 depend from independent claims 1, 12, 23, and 34, and therefore are patentable for the reasons previously discussed.

In light of the foregoing amendments and remarks, Applicants believe that pending claims 1-44 are in condition for allowance, and that action is respectfully requested. If there are any remaining matters that can be handled in a telephone conference, the Examiner is invited to telephone the undersigned attorney, Gregg Jansen, at (303) 938-9999 ext 12.

Respectfully submitted,

Date: 3/4/04



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